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| EXAMINER |
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BOYD, JENNIFER A

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| ART UNIT | PAPER NUMBER |
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1771

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/743,859 | <b>Applicant(s)</b><br>OMMERBORN, DAGMAR |  |
|                              | <b>Examiner</b><br>Jennifer A. Boyd  | <b>Art Unit</b><br>1771                  |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/21/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The Applicant's Amendments and Accompanying Remarks, filed December 27, 2005, have been entered and have been carefully considered. Claims 1 – 17 are amended, claims 18 – 25 are added and claims 1 – 25 are pending. In view of Applicant's arguments regarding the rejections over Warthen, the Examiner withdraws all the previously set forth rejections over Warthen as detailed in the previous Office Action. The previously applied rejections have amended below to account for Applicant's amendments to the claims. The invention as currently claimed is not considered to be patentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1, 8 and 13 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (WO 01/80798).

Evans is directed to a bandage (Title).

As to claim 1, Evans teaches a bandage comprising a weft insertion fabric (Abstract) and a pressure sensitive adhesive (page 6, lines 15 – 30). It should be noted that a weft insertion fabric is known in the art to be a "warp knit". It should be noted that the recitation of "a self-windable adhesive tape" is not given patentable weight at this time since the prior art meets the structural and/or chemical limitations set forth and there is nothing on record to evidence that the prior art product could not function in the desired capacity. The burden is shifted upon the

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Applicant to evidence the contrary. It should be noted that the limitation of “adapted to cable winding” is considered to be an “adapted to” type limitation. It has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

As to claims 13 - 14, Evans shows in Figure 2 the use of a two-yarn system and the lapping as specified by Applicant.

As to claims 1 and 8, Evans discloses the claimed invention except for that the material thickness is 0.1 – 1.0 mm, the basis weight is between 40 – 200 gsm and the adhesive coating weighs 20 – 150 gsm as required by claim 1 and the adhesive coating weighs no more than 65 gsm as required by claim 8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a tape having the claimed specifications in regards to thickness, adhesive weight and basis weight, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the material thickness, basis weight and adhesive weight in order to create a self-adhering splint with optimal flexibility and strength.

4. Claims 2 – 3, 5 - 6, 9 – 12 and 15 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (WO 01/80798) in view of Spillane et al. (US 4,881,383).

Evans is directed to a bandage (Title).

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As to claim 2, Evans teaches a bandage comprising a weft insertion fabric (Abstract) and a pressure sensitive adhesive (page 6, lines 15 – 30). It should be noted that a weft insertion fabric is known in the art to be a “warp knit”.

As to claim 12, Evans teaches that the fabric can comprise polyester or polyamide among other types of fibers (pages 4 – 5).

As to claim 18, Evans teaches a bandage comprising a weft insertion fabric (Abstract) and a pressure sensitive adhesive (page 6, lines 15 – 30). It should be noted that a weft insertion fabric is known in the art to be a “warp knit”. Evans shows in Figure 2 the use of a two-yarn system and the lapping as specified by Applicant. It should be noted that Evans does not indicate that the knitted structure has a pile and the drawings do not indicate a pile structure, therefore, the Examiner considers the fabric to be “pileless”. It should be noted that the recitation of “a self-windable technical adhesive tape for use in the automotive industry” is not given patentable weight at this time since the prior art meets the structural and/or chemical limitations set forth and there is nothing on record to evidence that the prior art product could not function in the desired capacity. The burden is shifted upon the Applicant to evidence the contrary.

As to claim 23, Evans teaches that the fabric can comprise polyester or polyamide among other types of fibers (pages 4 – 5).

As to claims 15 and 18, Evans shows in Figure 2 the use of a two-yarn system and the lapping as specified by Applicant but fails to teach that the knit has a smooth side visually indicated by an optical lustrous appearance. Additionally, Evans fails to teach that the weft insertion stitches can be specifically in a velvet construction as required by claim 15.

Spillane teaches a warp knitted fabric having a satin-effect by warp knitting a set of yarns in a stitch pattern extending underlaps of the yarn at the technical back of the fabric. The underlaps will provide a surface appearance of a satin weave. Spillane teaches that the another set of warp yarns may be knitted in a jersey, chain or other plain stitch pattern at the technical face of the fabric as a substrate or ground to provide structural integrity to the fabric (column 1). See Figure 1 for satin stitch (II) and chain stitch or pillar stitch (III) configurations. Spillane notes that the fabric has a glossy satin face (column 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the satin stitch with the chain stitch of Evans as suggested by Spillane to create a bandage having an aesthetically pleasing appearance provided by the satin stitches while having the structural integrity provided by the chain stitches.

As to claims 3, 9 – 11, 16, 21 – 22 and 24 – 25, Evans in view of Spillane discloses the claimed invention except for the basis weight is 70 – 110 gsm as required by claim 3, the carrier thickness is 0.2 to 0.7 mm as required by claim 9, the stitch density is at least 80 per dm as required by claim 10 and between 195 per dm to 250 per dm as required by claim 21 and the wale density is at least 80 per dm as required by claim 11 and between 110 to 150 per dm as required by claim 22 and the linear density of the fibers range from 20 – 70 dtex as required by claim 16, between 25 – 55 dtex as required by claim 24 and between 30 – 45 dtex as required by claim 25. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a tape having the claimed specifications in regards to thickness, adhesive weight, basis weight, stitch and wale density and linear density of the fibers, since it has

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been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454 USPQ 233 (CCPA 1955). In the present invention, one would have been motivated to optimize the fiber linear density, material thickness, basis weight, adhesive weight and stitch and wale density in order to create a self-adhering splint with optimal flexibility and strength.

As to claims 5 – 6, 17 and 19 – 20, although Evans in view of Spillane does not explicitly teach the claimed breaking strength of at least 15 N/cm as required by claim 5 and between 15 – 70 N/cm as required by claim 19, the breaking extension not more than 60% as required by claim 6 and between 10 – 25% as required by claim 20 and bond strength on steel of more than 3 N/cm as required by claim 17, it is reasonable to presume said properties are inherent. Support for said presumption is found in the use of like materials (i.e. a warp knitted fabric having a pressure sensitive adhesive coating) which would result in the claimed properties. The burden is upon the Applicant to prove otherwise. In addition, the presently claimed properties would obviously have been present once the Evans in view of Spillane product is provided.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (WO 01/80798) in view of Spillane et al. (US 4,881,383) as applied above and further in view of Murphy et al. (US 5,762,623).

Evans in view of Spillane teaches the claimed invention above but fails to teach that the adhesive tape is hand tearable in the cross direction.

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Murphy is directed to an elastic bandage (Title) comprising a warp-knitted weft insertion fabric (Abstract). Murphy teaches that the tape is hand tearable (column 3, lines 20 - 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tape of Evans in view of Spillane hand tearable as suggested by Murphy motivated by the desire to easily create a tape with the desired length depending on end use.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (WO 01/80798) in view of Spillane et al. (US 4,881,383) as applied above and further in view of the article entitled "Solvent-Free Radiation-Curable Polyacrylate Pressure-Sensitive Adhesive Systems" by Z. Czech, et al.

Evans teaches that the pressure sensitive adhesive comprises rubber latex based adhesives and also can include certain acrylate ester copolymers (page 7, lines 1 - 6).

Evans fails to teach that the adhesive is UV crosslinked as required by claim 7.

The article teaches that there is a broad spectrum for UV-crosslinkable polyacrylate hot-melt pressure sensitive adhesives including medical or hygiene products such as bandaids because of their excellent adhesion and good skin compatibility (page 190, column 2).

It would have been obvious to one of ordinary skill in the art to UV crosslink the adhesive of Evans as suggested by the article motivated by the desire to improve the adhesion strength of the adhesive layer.

### ***Response to Arguments***



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7. Applicant's arguments regarding the rejections over Warthen (US 4,798,200) are considered to be persuasive and the rejections have been withdrawn.

8. Applicant's arguments regarding the rejections over Evans (WO 01/80798) have been fully considered but they are not persuasive.

Applicant argues that Evans teaches an adhesive bandage, not an adhesive tape as claimed. Applicant fails to identify what structures the claims should be limited to by their recitation of "adhesive tape" such that it would be distinguished from the prior art. Absent such information, the claimed term must be read in a broad manner which is not found to significantly impact the scope of the claims. Although Evans teaches an adhesive bandage rather than adhesive tape, Evans meets all the structural and/or chemical limitations set forth and there is nothing on record to evidence that the prior art product could not function in the desired capacity. The burden is shifted upon the Applicant to evidence the contrary. Furthermore, an adhesive bandage can be considered to be an adhesive tape because it adhesively attaches to a substrate as defined by a tape.

Applicant argues that Evans fails to teach the claimed structural requirements such as basis weight, thickness, etc. In regards to the material thickness, coating weight, basis weight, etc., the Examiner has submitted that these parameters are optimizable since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. The Applicant has indicated that the claimed material thickness, coating weight, basis weight, etc. exhibit surprising results but the Applicant has not provided evidence to support the statement. If the claimed ranges have unexpected results, the burden is upon the Applicant to demonstrate that the claimed ranges are

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not a matter of simple optimization. The Examiner highly suggests to the Applicant to submit a 37 CFR 1.132 Declaration to establish unexpected results. In the Declaration, the Applicant should compare a sufficient number of tests both inside and outside the claimed range to show the criticality of the claimed range. *In re Hill*, 284 F.2d 955, 128 USPQ 197 (CCPA 1960) and must compare the claimed subject matter with the closest prior art to be effective to rebut a prima facie case of obviousness.

Applicant argues that Evans fails to teach a pileless carrier fabric. It should be noted that Evans does not indicate that the knitted structure has a pile and the drawings do not indicate a pile structure, therefore, the Examiner considers the fabric to be “pileless”.

Applicant argues that one of ordinary skill in the art would have not sought to modify the Evans bandage disclosure in any relevant way by applying anything disclosed by Spillane. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Although Spillane is concerned with garments while Evans is concerned with bandages, they are both concerned with fabric and pressure sensitive adhesive laminates. Spillane provides clear motivation for using a combination of stitches for an aesthetically pleasing surface and structural integrity.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carr (GB 1,406,990) is directed to a surgical plaster comprising a pressure-sensitive adhesive coated on a warp-knitted fabric.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer Boyd  
March 16, 2006

  
**ULA RUDDOCK**  
**PRIMARY EXAMINER**